

**Electronic Filing System** 

# Submission Manual ePAVE

for Biosequence Listings

**Version 5.1** 

Spring 2003





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# UNITED STATES PATENT AND TRADEMARK OFFICE Commissioner of Patents Washington, D.C. 20231

April 2003

Dear User:

Thank you for using the Electronic Filing System (EFS) and its submission tool, ePAVE 5.1, to file your patent application electronically.

The USPTO initiated the development of EFS to provide a means for applicants or their representatives to submit patent applications and related documents to the USPTO using the Internet. The use of the Electronic Filing System supports the USPTO strategic goal to integrate patent business practices with information technology to bring about effective use of electronic government as part of conducting patent business.

This user manual provides detailed instructions for using the ePAVE submission program, and also provides guidance including the system requirements, business context of use, and support available for the product. ePAVE is the software application that you use to bundle and transmit your documents to the USPTO.



# PART 1: A QUICK GUIDE TO EPAVE 5.1

• Step 1 – Obtain ePAVE 5.1 software. The software can be downloaded from <a href="https://www.uspto.gov">www.uspto.gov</a> or provided on CD from the Patent Electronic Business Center by calling toll-free 1-866-217-9197. The ePAVE software has a low level Public Key Infrastructure (PKI) certificate built in. This certificate may be used to file new utility and provisional applications. To file subsequent submissions, obtain a customer number and high level PKI digital certificate from the USPTO.

Full details are listed at the Electronic Business Center (EBC) site within the main web site of the USPTO at: www.uspto.gov/ebc.

• Step 2 - Install ePAVE 5.1.

Detailed installation instructions are listed in the overview, in Part 2 of this manual.

• Step 3 – Launch ePAVE 5.1.

Launch ePAVE by double-clicking the ePAVE icon from their desktop or by selecting ePAVE from the *Start* menu under *Programs*.

• Step 4 – Begin to use ePAVE.

Immediately after launching ePAVE, users will see the ePAVE splash screen. Click on *Next* at the bottom of the screen to proceed.





ePAVE splash screen

• Step 5 – Ensure that the most current version of ePAVE is running.

A dialogue box will appear, asking: "Would you like to verify if you are running the most current version of ePAVE software?"



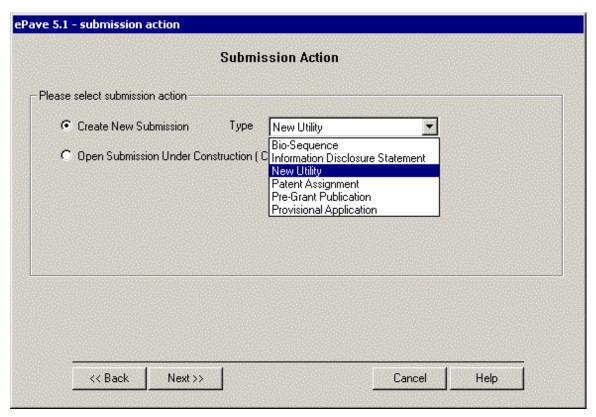
Version Verification dialogue box

Select **Yes** to verify now. Select **No** to verify later.

• **Step 6** – Begin creating a submission.



After verifying the version, the *Submission Action* screen is displayed. Users have the option of creating a new submission or opening a submission that has been started, but not completed. (A submission that has been started but not completed is listed as a Submission under Construction.)



Submission Action screen

• Step 7 – Choose one of the six submission types.

The drop-down menu of submission types is displayed in the Submission action screen. The list displays an alphabetic list of the six submission types that can be filed in ePAVE. Users must choose from the following six submission types: bio-sequence listing, information disclosure statement, new utility, patent assignment, pre-grant publication, and provisional application.

NOTE: The new utility is the default submission type.

• Step 8 – Complete data entry and create files appropriately for each submission type.

# USP10 Electronic Filing System



Each submission type has its own set of instructions that are available as separate documents or as one large manual. In order to fully understand the intricacies of each submission type, users are encouraged to review the manuals before using ePAVE. The manuals are available for download and are listed at the Electronic Business Center (EBC) site within the main web site of the USPTO at: <a href="https://www.uspto.gov/ebc">www.uspto.gov/ebc</a>.

• Step 9 – Submit to USPTO and obtain acknowledgement receipt.

Using either the built-in low level PKI certificate or the USPTO provided high-level PKI certificate, a secure encrypted session is established with the USPTO server. When the completed submission is received by USPTO an acknowledgement receipt containing the application number, confirmation number, time and date of receipt, and additional information is returned. This acknowledgement receipt will serve as proof positive that what was submitted was what USPTO received.



### PART 2: AN OVERVIEW OF EPAVE 5.1

#### **SECTION 1: Introduction**

The following lists information about system requirements and limitations, and provides detailed installation instructions for installing and using the Electronic Filing System (EFS) and its submission tool, ePAVE 5.1, to file patent applications electronically.

### **SECTION 2: System Requirements**

**Processor:** 266 MHz or higher Pentium Processor 266 MHz or higher (or similar AMD

Processor)

Memory: 128 MB RAM.

Screen Display: 1024 x 768 or higher

**Browser:** Microsoft Internet Explorer 5.0 Service Pack 3 or Microsoft Internet Explorer 5.5 Service Pack 2 with msxml upgraded to msxml 3.0 Service Pack 2. For more information on the msxml upgrade see:

 $\underline{http://msdn.microsoft.com/downloads/default.asp?url=/downloads/sample.asp?url=/msdn-files/027/001/772/msdncompositedoc.xml}$ 

**Tiff Viewer Plug-In:** AlternaTIFF v1.3.5 or higher for IE5.0, or AlternaTIFF v1.4 or higher for IE5.5 and higher.

Free Hard Disk Space: 25 Megabytes is required for the ePAVE application alone.

**Modem:** Internet connection at 56 Kbps or faster

**Operating System:** Microsoft Windows 98SE, Windows ME, Windows2000 with Service Pack 2 or later, Windows NT 4.0 with Service Pack 6 or later or Windows XP with Service Pack 1

**Applications:** Microsoft Word 97, Word 2000, or Word XP including Office Assistant

Graphics Package for TIFF image formatting

**Printer Driver (s)** must be up to date

**Scanner:** Any scanner capable of producing black and white TIFF images at 300 dpi with CCITT Group 4 compression



#### **SECTION 3: Submission Restrictions**

Any patent applications submitted to the USPTO through EFS will include one or more electronic files. The following limitations apply to the files that can be submitted in a single submission package.

**Applications submitted electronically over the Internet**: The total submission size must be 100 MB or less. If the total submission size exceeds 100 MB, the submission should be copied to a CD-ROM or CD-R and that CD delivered to USPTO.

#### Any electronic submission is subject to the following limitations:

A new utility or provisional submission may include no more than 5 assignment coversheets.

An information disclosure statement may cite at most 50 U.S. patents and 50 U.S. published application citations.

A subsequently filed assignment submission may include a maximum of 15 cover sheets. Each cover sheet must reference at least one tiff image.

Images must be included as tiff image files in the following format: Black and white, 300 dpi, CCITT Group 4 compression or uncompressed, maximum size of 8 ½ by 11 inches.

#### **SECTION 4: Detailed Installation Instructions**

#### Obtaining ePAVE: CD-ROMs or the USPTO Web Site

Users can download ePAVE 5.1 from the Electronic Business Center (EBC) site within the main web site of the USPTO at: <a href="www.uspto.gov/ebc">www.uspto.gov/ebc</a>. The program is also provided on a CD-ROM supplied by the USPTO. Contact the Patent Electronic Business Center toll-free at 1-866-217-9197 to obtain a CD.

#### **Installing from a CD-ROM:**

When a CD-ROM is used to install ePAVE, the installation program will automatically launch when the Autorun feature is enabled on the user's computer.

If the installation program does not automatically launch, locate the installation file setup.exe on the CD-ROM and double-click on the setup file.



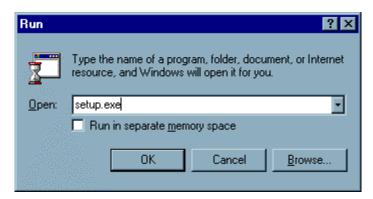
#### Installing from the download:

If ePAVE is downloaded from the USPTO website, the user should locate the installation file, setup.exe on the user's computer and install the file by double-clicking on the setup file.

#### Running ePAVE Installation from the Start menu

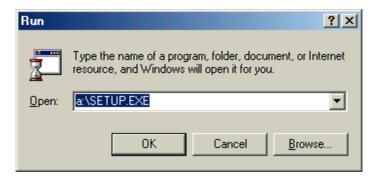
Using either a CD-ROM or the USPTO web site, users can run the ePAVE installation by completing the following steps.

• Select *Run* from *Start* menu.



Run screen

• Use the Browse button to locate the folder where the setup program "setup.exe" was saved to the user's computer or the drive and folder where it is located on the CD-ROM CD). Or, users can type the full path and file name instead of using the browse button.



Run file selection

- Highlight the file name setup.exe and select **OK**.
- The ePAVE Installshield launches and guides the user through the installation.



• It is recommended that users install the default configuration. To do so, the *Next* button must be clicked for all choices after choosing *Yes* to the license agreement.

#### Installing New Versions of ePAVE

If an earlier version of ePAVE is present it should be uninstalled prior to installing ePAVE 5.1.



ePAVE Installation screen

• Choose the *Remove* radio button and select the *Next* option. If the user chooses to install all the components of ePAVE, all default settings must be left in place.

Users can also uninstall ePAVE by completing the following steps.

- Select *Settings* from the *Start* menu.
- Select *Control Panel* from the *Settings* drop-down submenu.
- Double-click the *Add/Remove Programs* icon within the *Control Panel* submenu.
- Highlight *ePAVE* from the list of programs that appears in the lower half of the *Add/Remove Programs* window.
- Select the *Add/Remove* button.



When an application is about to be uninstalled, a warning about removing shared files may appear. The message "Are you sure you want to remove the shared file?" will appear. If this warning appears, select either *No* or *No to All* to ensure that other applications continue to function properly.

NOTE: If users remove files that are shared by other programs during uninstallation, their system may not function properly. Leaving shared files on the computer will not harm the system.

After completing the uninstallation of the older version of ePAVE, install ePAVE 5.1.

#### **Special Installation Circumstances**

#### **Networked Computers**

ePAVE can be used with Internet connections on a network and with networked machines. In order to install ePAVE or some of its components, users will be required to have local administrator privileges. If users are unsure if they have these privileges, it is best to contact Information Technology staff. The installation program will offer a prompt during the installation process to indicate that local administrator privileges are required for installation.



Administrator Privilege dialogue box

Although it is possible to use ePAVE in a network environment, users should carefully consider its effect on file management.

In a networked environment, application files created in ePAVE must reside in network storage that is mapped to all machines that are working with ePAVE using the same naming convention. All files should be in a dedicated folder for two reasons: to allow common access to the files from any PC on the network and to allow EFS to locate, attach, and bundle the files within the application during the final assembly of the submission into a package.

EFS stores all files from a single application together, based on their pathname. Thus, once the files have been stored, their location should not be changed.



#### **Multiple Computers**

The installation of ePAVE is subject to license agreements that set forth the terms to allow installation on one or more computers.

In order for ePAVE to upload an electronic submission properly, a digital certificate file must be transferred. Users may obtain a high level digital certificates in a two-step process by requesting reference information from the USPTO and creating the certificates with the USPTO's Direct Security software after receiving access codes. A low-level digital certificate is built in to ePAVE and may be used for new utility and provisional submissions only.

There is no need to reinstall USPTO Direct on multiple machines because users may transfer their profile and the digital certificate file to a computer that will be used to file the patent application submission.

#### What is ePAVE? What is EFS?

EFS is designed around a common submission engine that presents data collection screens to the user to collect patent application information and create electronic patent application forms in eXtensible Markup Language (XML). The submission engine is a desktop software program called EFS electronic Packaging and Validation Engine (ePAVE). In addition to providing electronic forms, ePAVE allows the user to attach a tagged, structured specification document that includes links to applicable figure image files. Other patent application documents, such as a declaration or a power of attorney, may attached as scanned single-page tiff image files or included as XML documents.

EFS electronic Packaging and Validation Engine (ePAVE) desktop software enables patent applicants and appointed practitioners to conduct real time electronic filing of select new utility and provisional patent applications. EFS also allows user to file four types of subsequent filings over the Internet. These subsequent file types are select pregrant publication submissions; information disclosure statements for pending applications, assignment documents for previously filed applications and patents, and submission of amino acid or nucleotide sequence listings required during prosecution of a pending biotechnology patent application.

#### Who may use EFS?

The USPTO authorizes select individuals to use EFS to file patent applications electronically. These authorized individuals include inventors, attorneys of record or otherwise registered, agents of record or otherwise registered, assignees of record of the entire interest, and assignees of record of an undivided part interest. For more information see 37 C.F.R. 1.33(b).

#### **Application Types Allowed**

EFS allows submission of six filing types: new utility and provisional patent applications, pre-grant publication submissions, information disclosure statements and



biosequence listings for pending patent applications, and assignment recordation documents for previously filed patent applications and patents.

To use EFS software to submit pre-grant publication filings, please refer to pre-grant publication regulations 37 CFR, Sections 1.211-1.221, for a full description of the process and legal requirements.

A biosequence listing in computer readable form (CRF) may be included with a new utility or provisional application. Alternatively, if you have a pending utility patent application that requires a nucleotide or amino acid sequence submission, you may file the biosequence listing as a separate follow-on filing. The submission software accepts ASCII Sequence Listing files created by a sequence listing authoring tool, PatentIn (as well as accommodating ASCII Sequence listing files created by other standard methods or editors). Refer to 37 CFR 1.824. The sequence listing shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats are accepted.

For new utility, provisional, and pre-grant publication submissions, the user must first create a specification document as an Extensible Mark-up Language (XML) tagged electronic document. The user may then use ePAVE submission software to attach and send the application specification with any figures to USPTO along with other patent application forms and files.

Using ePAVE submission software users may: author XML documents such as fee transmittal or application data sheet; attach electronic documents and image files in specified formats; and validate the completeness of the submission based on patent business rules. The ePAVE program automatically bundles, compresses, and digitally signs the submission package once the applicant or appointed practitioner enters an electronic signature and digital certificate authentication information. Using the digital certificate, the software automatically establishes a Secure Socket Layer encrypted session with the USPTO server and transmits the package to the USPTO. An acknowledgement receipt is displayed in real time at the filer's desktop after the submission package is received and validated at the USPTO without error.

# **SECTION 5: Key Steps in the Electronic Filing Process**

The following procedure outlines the steps that must be completed in order for you to file a patent application electronically via EFS.

Step 1: Install ePAVE

Install the ePAVE tool.



#### Step 2: Obtain a PKI digital certificate

According to 35 U.S.C. Section 122 USPTO must maintain patent applications in confidence. In order to comply with this law, the USPTO distributes software that supports secure communication among the USPTO, applicants, and practitioners.

As a result, the USPTO has implemented several electronic commerce projects that promote secure communications, including instituting rules to protect applicants when they file patent applications electronically and providing electronic access to pending patent applications to authorized persons via the Patent Application Information Retrieval (PAIR) system. USPTO has implemented public key infrastructure technology to provide the security of these systems. A PKI digital certificate is necessary to ensure the security of the electronic transmission of patent applications and is used to establish a Secure Socket Layer connection with the USPTO server for secure transmission of patent application information.

When filing a new utility or provisional patent application, users may use the low-level digital certificate that is built in to ePAVE. The low-level digital certificate is compatible with the public key infrastructure that is implemented by the USPTO and allows secure communications between applicants and the USPTO. Low-level digital certificates may only be used to file new utility and provisional submissions.

High-level digital certificates issued by the USPTO require an approval process. USPTO will also provide a version of Entrust Direct security software that is custom-made for the USPTO and is used to create the high-level digital certificate. Entrust Direct is compatible with the public key infrastructure that is implemented by the USPTO and enables secure communications among individual applicants, practitioners, and the USPTO.

Note: Obtaining a high level PKI certificate is recommended. It can be used to access application information in private PAIR and allows all six filing types to be submitted.

To find out how to obtain a PKI digital certificate, please contact the Electronic Business Center (EBC) for patents.

#### Step 3: Format all files

Any patent application that is submitted to the USPTO via EFS must meet certain formatting requirements.

#### File Names

File names are limited to 25 characters and must be alphanumeric. The hyphen and period characters can be used in file names. The USPTO recommends using the 8.3 filenaming convention when naming files that will be used with ePAVE. This convention allows for file name to contain up to eight characters for the name of the file itself and



three characters for the file extension and requires both components to be separated by a period. Here is an example of a file name that complies with the 8.3 file-naming convention; newfile1 doc

Allowable characters in file and folder names include letters, numbers, hyphens (-), and periods (.). Special characters should not be included in file names, such as ampersands (&), commas (,), number signs (#), quotation marks ("), and spaces (). It is imperative that special characters not be used because they will cause errors that may affect the transmission of the patent application.

In naming the ePAVE folder that contains the submission files, the folder name must be different than the names of any other files or figures that are included in the submission.

#### **Images**

Since images are an integral part of patent applications, they must meet strict requirements before being submitted as part of a patent application. The USPTO has established the following requirements for images that apply to any patent application that is filed electronically.

All images must be scanned or converted into TIFF images and comply with the following format: a resolution of 300x300 dpi, black and white only, compressed with the CCITT Group 4 Compression or uncompressed, and a maximum size of 8 ½ by 11 inches. These formatting requirements apply to the following types of images:

Inline graphics (including complex chemical structures, math equations, tables, and custom characters)

Drawings (figures) – It is recommended that one Figure of drawing be included in each tiff file.

Declaration forms (These may also be submitted as XML files if they are created in ePAVE.)

Assignment documents

Small entity statements

Power of Attorney forms (These may also be submitted as XML files if they are created in ePAVE.)

These requirements for TIFF images will satisfy all of the quality requirements set forth in 37 C.F.R. 1.84. When the USPTO prints patent applications that were submitted through EFS onto 8 1/2" x 11" paper, the margins will be as follows: top-1 inch; left-1 inch; right- 3/4 inch; bottom- 3/4 inch. These margins satisfy 37 C.F.R. 1.84(g).

# **SECTION 6: Using ePAVE 5.1**

#### Introduction

The ePAVE submission engine is used to create a patent application (also referred to as a package), view and print it, validate it, and send it electronically to the USPTO.



#### **Updating EFS Submission Program (ePAVE)**

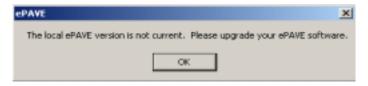
The USPTO will periodically release new versions of the ePAVE software. When this occurs, users will need to update the ePAVE software. In order to ensure that the most current version of ePAVE is running, ePAVE automatically provides the option to check the version each time ePAVE is launched.



**EPAVE Version Verification** 

Select *Yes* to automatically launch an Internet connection and connect to the USPTO server. If the installed version on your machine is not the most recent, check the USPTO website at <a href="http://www.uspto.gov/ebc/efs/index.html">http://www.uspto.gov/ebc/efs/index.html</a> to determine if a new version is available.

If you receive the following error message after clicking **Yes**, your version of ePAVE is not the most current. Select **OK** on the Version error screen and go to the EFS website at www.uspto.gov to download the latest ePAVE software. You may also obtain updated versions of the five EFS User Manuals from this site.



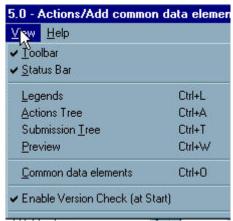
Version Error screen

Select *No* on the Version Verification screen to launch ePAVE software without checking for the most recent version. After selecting *No*, a new submission may be created. After beginning the upload process, the ePAVE software will automatically check the version. If the installed version is not the most recent, check the USPTO website at <a href="http://www.uspto.gov/ebc/efs/index.html">http://www.uspto.gov/ebc/efs/index.html</a> to determine if a new version is available.



#### Disable or Re-enable Version Checking at Startup

If you want to disable ePAVE's automatic version checking on startup, you may deselect it from the *View* menu. Click the *Enable Version Check (at Start)* to toggle it on and off. The check mark indicates that version checking at startup is active, and is not shown once you disable this feature.



Disable or Re-enable Version Checking

NOTE: You cannot disable the version check at upload feature. When ePAVE performs this check, it will only inform you whether or not your ePAVE version is the most current.

#### The ePAVE User Interface

The ePAVE interface includes the following components—menus, a toolbar, a data entry screen and navigation screens. The menus allow you to perform various functions, including opening and closing documents, saving and printing documents, validating your submission, and sending it to the USPTO. The toolbar provides buttons that allow you to perform various ePAVE tasks without using the menus. The screens contain the data fields where you enter your submission information that is sent to the USPTO and allow you to navigate through your submission according to the actions that you wish to perform, or moving from form to form.

#### The ePAVE Toolbar

The ePAVE toolbar is shown below:



ePAVE Toolbar

The following provides a list of the toolbar icons and their names, and also provides a description of the function of each icon.

# USP10 Electronic Filing System



- New Icon. Use this icon to begin a new EFS submission.
- Open Icon. Use this icon to open an existing EFS submission file that you previously saved. Locate the existing submission folder in the directory path.
- Save Icon. Use this icon to save the EFS submission information you have authored so far.
- Cut Icon. Use this icon to remove text from the selected text field.
- Copy Icon. Use this icon to copy the selected text.
- Paste Icon. Use this icon to paste text to the selected text field.
- **Print Icon.** Use this icon to print the information on the active screen.
- **? Help Icon.** Use this icon to access help information for using ePAVE.
- Toggle Legend Icon. Use this icon to display or hide the tree legend.

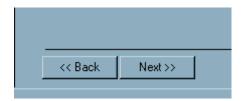
#### **Navigating Through ePAVE**

Users can navigate through ePAVE in a number of ways.

- A user may navigate by using a mouse and interacting with the graphical screen display provided and entering text from the keyboard or a user may navigate through the screens using keystrokes only.
- A user may move from screen to screen using the *Back* and *Next* buttons provided in the ePAVE wizard.
- A user may navigate through the screens by selecting a particular action from the *Actions tree*.
- A user may navigate to particular screens using the *Forms tree*.

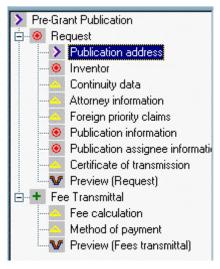
New users may wish to walk through all the screens in ePAVE and would benefit from seeing all the screens. That user would likely use the ePAVE wizard navigation by using the *Next* and *Back* buttons to move through the application.





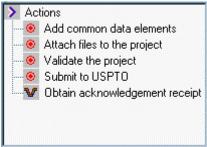
Back and Next buttons in the ePAVE wizard

More advanced users may wish to include information on specific screens only and would benefit from navigating via the *Forms* tree. Selecting a specific screen from the forms tree will display that screen and allow data entry into that screen.



Forms tree

Users may navigate by function using the *Actions tree* to perform a particular function, such as attaching or removing a file from the *Attach Files to Project* screen by selecting Attach files to the project from the *Actions* tree.



Actions tree

#### **Keyboard and Mouse Navigation**

Once a screen is displayed, a user can move through the data fields by using the **TAB** key on the keyboard or by clicking in each field with the mouse. Users can also move

# USP10 Electronic Filing System

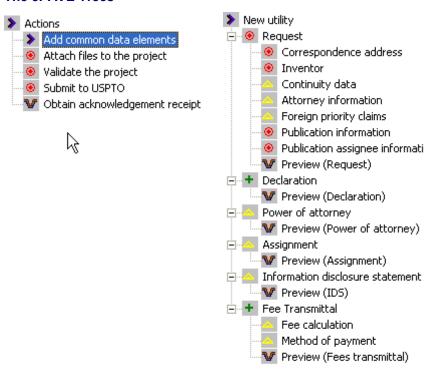


backwards through the fields by simultaneously pressing the **SHIFT** and **TAB** keys on the keyboard. Selections of radio buttons on the screens can be done using a mouse or by toggling through the choices using the up and down arrow keys. Check boxes can be checked or unchecked by clicking with the mouse or by using the space bar. Buttons on the screen can be pressed by clicking on them with the mouse or by using the space bar. For example, when a user wishes to move to the next screen, the user can select the *Next* button and press the space bar.





#### The ePAVE Trees



The left side of each ePAVE screen includes the *Actions tree* with the *Forms tree* displayed beneath it.

#### Actions Tree

Selecting one of the items in the *Action Tree* activates a desired action. The Actions tree will indicate which action is being completed by displaying the purple arrow icon.

Enter common data elements will launch the *Add Common Data Elements* screen where data common to many of the ePAVE-generated forms may be entered.

Attach files to the project will launch the *Attach Files to Project* screen where files may be attached to and removed from the submission. The contents of the submission may also be viewed in the Attach files to the project screen.

**Validate the project** will launch the *Validate the Project* screen where the correctness and completeness of the submission can be determined. Error and warning messages displayed on this screen will help users ensure that a complete and correct data set is being sent to USPTO.



**Submit to USPTO** will launch the *Submit to USPTO* screen where comments about the submission may be entered and where electronic and digital signatures are provided. The *Send* button on this screen may be selected to begin transmission of the filing to the USPTO server.

**Obtain Acknowledgement Receipt** will launch the *Acknowledgement Receipt* view and allow printing of the acknowledgement receipt returned by USPTO after submission has occurred.

#### Forms Tree

A user can navigate to particular screens in ePAVE using the Forms Tree.

XML forms are created in ePAVE by entering data on one or more screens. The screens associated with each form are listed in the *Forms Tree*. Each of the ePAVE screens is represented by a symbol and text branches in the *Forms Tree*. A user can access the different screens by selecting the branch that corresponds to the desired screen. The specific Forms tree and screens that are available is dependent upon the type of submission being filed.

Once a screen is displayed, a user can move through the data fields by using the **TAB** key on the keyboard or by clicking in each field with the mouse. Users can also move backwards through the fields by simultaneously pressing the **SHIFT** and **TAB** keys on the keyboard. Selections of radio buttons can be on the screens can be done using a mouse or by toggling through the choices using the up and down arrow keys. Check boxes can be checked or unchecked by clicking with the mouse or by using the space bar. Buttons on the screen can be pressed by clicking on them with the mouse or by using the space bar. For example, when a user wishes to move to the next screen, the user can select the next button and press the space bar.

The ePAVE data entry screens must collect a minimum amount of information to ensure that the electronic patent application filing is complete and valid for examination and subsequent publication. All mandatory fields or sections in ePAVE are identified by bold type, while optional fields or sections are shown in regular type.

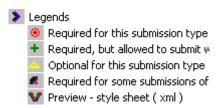
#### **Help button**

The Help button in the lower right corner of each screen will bring up screen-specific help to assist a user in filling out patent application documents.

#### Legend

The meaning of the symbols in the trees can be displayed by viewing the Legend.





ePAVE legend

The information entered in the fields on each screen is automatically tagged as XML (extensible markup language) output. The screens and fields are described in detail in the following sections: Creating a Bio-sequence listing, Creating a Provisional, Creating an Information Disclosure Statement, Creating New Utility, Creating a Pre-Grant Publication, or Creating an Assignment.

#### **Using the Address Book**

		name & address			
Prefix	Lastname	First name	Middle na	Suffix	Α
	Chen	Richard	K.		
_	Liang	Rose	L		
Dr	Sasane	Dinesh1	v	Jr	2
Dr Dr	Sasane Sasane	Dinesh2 Dinesh3	V	Jr Jr	2
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1					
Addres	o book				
	Brefix	_ Suffig	T	₩ Se	uch
F	intname				
Mid	dename				
L	ast name				
,	Address <u>1</u>				
J	Address2				
	City				
	State				
Εo	stal code				
	eMail				
I	elephone	Eax			

Address book

To facilitate the reuse of previously keyed data, ePAVE 5.1 offers an Address Book feature. In instances where name and address information must be entered, the user can reuse previously keyed information by clicking on the Ab key, <a href="#">(< Ab</a> to the right of the data fields. A user can enter a few letters of one of the names and select the **Search** key.



The Address book will search for that name and offer matching or nearly matching names in the data field. A user can highlight the desired name, double-click on it or select the **Select** key, and the name and/or address information for that address book entry will automatically be populated into the ePAVE screen.

Highlighting a particular field at the top of the data field and selecting the Sort key can sort entries in the address book.

Name and address information can be added to the address book by entering the desired data and selecting the **Add** key.

To delete an entry, highlight the name and address in the data field and select the **Delete** key.

#### Saving a Submission

A user can save ePAVE submission documents at any time. Saving preserves your patent application data so that you can change or print it at a later date. Use one of the following procedures to save the electronic files:

Click the *Save* icon on the toolbar. This immediately saves entered data.

OR

Go to the **File** menu and select **Save** 

The submission contents will be saved in the submission folder with a file extension of epv.

#### Printing in ePAVE

When application data sheet, fee transmittal, biosequence transmittal, information disclosure statement and assignment recordation forms are open, those forms will print when you select *Preview* from the *Forms* Tree or by selecting the *Print* icon, or by selecting *Print* from the *File* menu.

Forms may also be printed by highlighting the form in the *Attach Files to Project* screen and selecting *View*. Print the form by right clicking and selecting *Print* or by using the keyboard shortcut Ctrl + P.

Filing Large Submissions Using Compact Discs



If a user attempts to file a submission that exceeds the EFS system limit of 100 Megabytes, ePAVE generates an error message and advises the user to submit the large application on a compact disc (CD or CD-R). Submissions larger than 100MB cannot be submitted via the Internet. If a large biotechnology sequence listing, table, or computer program listing is causing the large application size, these items may be submitted with the application according to the requirements of 37 C.F.R. 1.52 (e) with the large section on CD and the rest in paper. However, regardless of the cause of the large size of the submission, EFS can be used to file the application on CD. The process requires a compact disc recorder, and can only be used for submissions that fit on a single compact disc.

### Before Saving to CD

Before saving the zip files and sending the CD to USPTO, verify that all image files are compressed. If the application figure images are not compressed, the images can be compressed using various image editors. Use the following procedure to compress application figure images:

- Remove the specification XML document from the attachments in ePAVE.
- Open one of the images in an image-viewing tool.
- Specify the following settings for the image:

File type: TIFF

Color: Black & White

**Compression:** CCITT Group 4 **Resolution:** 300x300 dpi

- Save the image.
- If the tiff image problem is caused by a declaration, power of attorney, or assignment tiff image file, do the following:
- Open the image in an image-viewing tool.
- Specify the following settings for the image:

File type: TIFF

Color: Black & White

**Compression**: CCITT Group 4 **Resolution**: 300x300 dpi

• Save the image.

Saving a Submission on CD



If the submission is still larger than 100 MB after compressing image files, use the following procedure to submit packages larger that 100MB on CD:

- Print out the Transmittal Form from the Attach Files to Project screen by selecting the file including the suffix pkgdata.
- Copy the submission folder that contains the entire application from the workstation to compact disc-recordable (CD-R) media.
- Wrap the CD in a hard case within a padded protective mailing envelope, and attach a copy of the transmittal form. Enclose a cover letter explaining that the submission contains an application that was too large to be submitted via the Internet. See 37 CFR 1.52 for more information on providing compact discs to USPTO.
- Hand carry or mail the CD-R and a copy of the paper transmittal form and cover letter to the USPTO. The submission may also be deposited with the US Postal Service under the Express Mail procedures of 37 CFR § 1.10.
- Keep a copy of the CD and transmittal form for your records.

Once the USPTO receives the CD in the mailroom, the date of receipt is recorded and the submission is uploaded to the EFS server, where the files are unzipped. The application files will then be processed as EFS submissions and an acknowledgement receipt will be mailed.

If the files contain large tables, sequence listings or computer program listings, the USPTO has the option of not printing the large files, but rather burning two CD-Rs of such data and treating them under the CD practice of 37 CFR 1.52(e). If the file is an amino acid/ nucleotide sequence listing, then one additional copy of such a sequence listing will be created and sent to Scientific and Technology Information Center as the Computer Readable Form of the sequence listing. In any case, one CD is placed in the file, and one is put in the CD repository.

USPTO Office of Initial Patent Examination's Electronic Application Review Office processes payment by credit card or deposit account in the same manner as an on-line submission. The files provided on CD are signed, so the patent application data is protected during mailing and any storage time at the USPTO.

#### **SECTION 7: Contact Information**

**Check the User Guide -** This manual provides all of the information needed to use the ePAVE software. Please check the table of contents to locate information.

**Check the Online Help** - Click *Help* in the ePAVE application to review information about the version of ePAVE that you are using.



**Check the EFS web site -** The EFS web site provides links to additional EFS support resources. The EFS web site is accessible at www.USPTO.gov/ebc/efs/index.html.

**Contact the EBC Customer Service Center -** 703-305-3028 or toll free at 1-866-217-9197 from 6 AM to 12 midnight Monday to Friday.

Contact the USPTO Patent Assistance Center (PAC) - 1-800-PTO-9199, efs@uspto.gov.



# **BIOSEQUENCE LISTINGS**

## **Biosequence Listings: At a Glance**

In order to file a biosequence listing electronically in ePAVE, users must complete certain steps.

Although users may navigate freely throughout ePAVE without following any set order, the steps and screens listed below follow the natural progression of ePAVE, as if the user were to select the *Next* button at the bottom of each screen.

STEP 1: Install and Launch ePAVE

STEP 2: Create a Submission Action and Submission Folder

**STEP 3**: Provide Data Within the Biosequence Module

- Add Common Data Elements Screen
- Bio-Sequence Listing Transmittal
- Attach Files to the Project Screen
- Validate the Project Screen
- Submit to the USPTO Screen
- Obtain Acknowledgment Receipt Screen



#### Install and Launch ePAVE

- Obtain ePAVE 5.1 by downloading the software from uspto.gov or by calling the
  patents Electronic Business Center toll-free at 1-866-217-9197 and requesting the
  software on a compact disk.
- Install ePAVE 5.1. This will create an icon on the desktop.
- Highlight the ePAVE 5.1 icon on the desktop and launch the program by either double-clicking on the icon or pressing *Enter* on the keyboard. This will launch the ePAVE 5.1 splash screen.



ePAVE splash screen

- Select the *Next* button to proceed. Select the *Cancel* button to exit ePAVE. Select the *Help* button for information about ePAVE.
- Selecting the *Next* button will launch a dialogue box that allows verification that the most current version of ePAVE is running.





Version Verification dialogue box

- Select **Yes** to verify that the most current version of ePAVE is running.
- Select *No* to verify later.

If the version is current a message box indicating such is displayed.

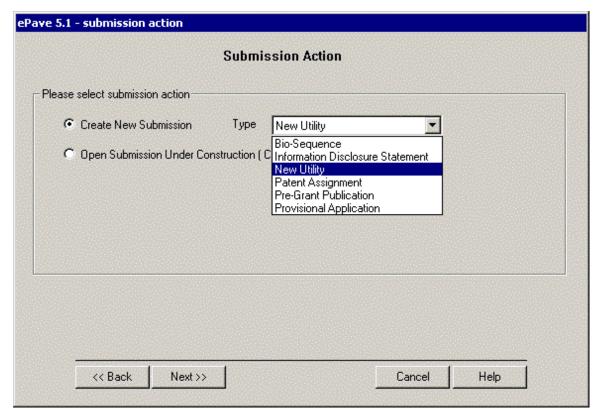


Current version message box



### Create a Submission Action and Submission Folder

#### **Submission Action Screen**

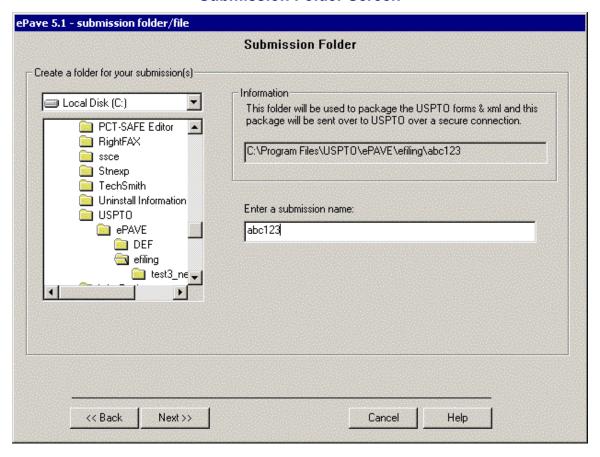


Submission Action screen

- To create a new submission, select the *Create New Submission* button and choose *Bio-Sequence* as the submission type from the drop-down menu.
- Select the *Back* button to return to the ePAVE splash screen. Select the *Next* button to proceed to the *Submission Folder* screen. Select the *Cancel* button to exit ePAVE. Select the *Help* button for information about the screen.



#### **Submission Folder Screen**



Submission Folder screen

If *Next* was selected, the Submission Folder screen will be displayed.

• From the drop-down menu select a location for the new submission folder.

#### Enter a submission name

• Enter a name to identify the submission. This will create a submission folder that will store all related documents for the submission. Enter any alphanumeric name without any spaces or special characters. ePAVE will automatically save files for this submission in the submission folder.

Note: Users are required to create a submission folder before working on a submission.

The submission folder may include documents formatted in XML (eXtensible Markup Language) language, such as the transmittal document and a Biosequence listing

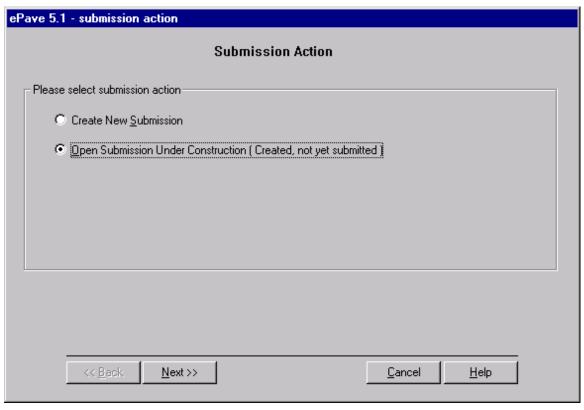


transmittal document. This folder may also contain an error log that includes validation errors (if applicable), the acknowledgment receipt (as proof that the USPTO received the submission), and a zip file that contains the entire submission being sent to the USPTO.

After the first submission folder is created, the next time a new submission folder is created in ePAVE, the directory will default to the directory where the previous submission folder is located.

• Select the *Back* button to return to the *Submission Action* screen. Select the *Next* button to proceed to the *Add Common Data Elements* screen. Select the *Cancel* button to exit ePAVE. Select the *Help* button for information about the screen.

#### Submission Action Screen



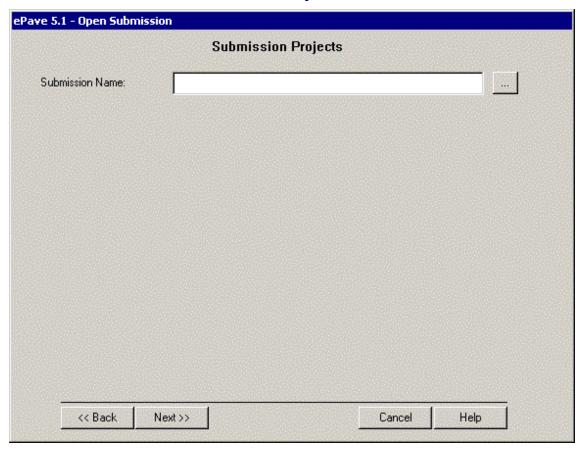
Submission Action screen

- To edit or modify an existing folder select the *Open Submission Under Construction (Created, not yet submitted)* button.
- Select the *Next* button to activate the *Submission Projects* screen.





### **Submission Projects Screen**

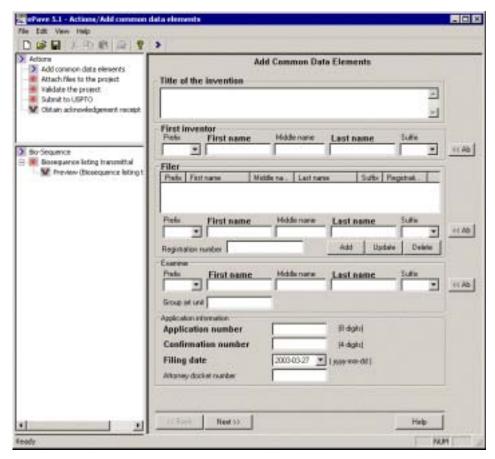


Submission Projects screen

- Type the folder path and name or select the button labeled ... which stands for browse to navigate to the folder to be opened. When the folder is opened select the file with the extension .epv.
- Select the *Back* button to return to the *Submission Action* screen. Select the *Next* button to proceed to the *Add Common Data Elements* screen. Select *Cancel* to exit ePAVE. Select *Help* for information about the screen.



# Providing Data in the Biosequence Listing Module Add Common Data Elements Screen



Add Common Data Elements screen

• Enter data that will be used on more than one ePAVE-created form in the data entry boxes.

#### Title of the Invention

• Enter the full title of the patent application associated with this biosequence listing. Include all spaces and punctuation. The title may contain a maximum of 500 alphanumeric characters. REQUIRED.

#### **First Inventor**

• Enter the name of the inventor who is listed first in the declaration of the patent application related to this submission. REQUIRED.

**Prefix**- Enter any name prefix of the first named inventor. Choose the desired prefix from the drop-down menu or type directly into the data field. OPTIONAL.



First Name - Enter the first or given name of the first named inventor. REQUIRED.

*Middle Name* - Enter any middle name of the first named inventor. OPTIONAL.

Last Name – Enter the last or family name of the first named inventor. REQUIRED.

**Suffix** – Enter any name suffix of the first named inventor. OPTIONAL.

All changes to the first inventor name information must be made from the *Add Common Data Elements* screen.

NOTE: Each name should contain a maximum of 50 characters. Characters beyond the 50<sup>th</sup> will be truncated within USPTO internal automated information systems.

#### **Filer**

- Enter the name of the person filing the biosequence listing and select the *Add* button
- Repeat for each person filing the submission.

**Prefix**- Enter any name prefix of the filer. Choose the desired prefix from the drop-down menu or type directly into the data field. OPTIONAL.

First Name - Enter the first or given name of the filer. REQUIRED.

*Middle Name* – Enter any middle name of the filer. OPTIONAL.

Last Name - Enter the last or family name of the filer. REQUIRED.

**Suffix** – Enter any name suffix of the filer. OPTIONAL.

Add, Update, or Delete information Select the *Add* button after entering the filer information. Enter additional filer name information if more than one person is filing the submission.

To edit filer information, select a filer's name from the list. The filer's name will be available in the data entry boxes for editing when the name is selected. Edit the information and select the *Update* button.

To delete a filer, select the filer's name from the list and select the *Delete* button.

#### **Examiner**

• Enter the name of the examiner assigned or likely to be assigned to the corresponding patent application. OPTIONAL.

**Prefix-** Enter any name prefix of the examiner. OPTIONAL.

User Manual for ePAVE 5.1 Biosequence Listings Page 37 of 53



*First Name* - Enter the first or given name of the examiner. REQUIRED if an examiner is specified.

*Middle Name* – Enter any middle name of the examiner. OPTIONAL.

*Last Name* - Enter the last or family name of the examiner. REQUIRED if an examiner is specified.

Suffix – Enter any name suffix of the examiner. OPTIONAL.

*Group Art Unit* – Enter the group art unit where the Examiner is assigned. OPTIONAL.

### **Application Number**

• Enter the USPTO assigned eight digit application number of the patent application associated with this biosequence listing. REQUIRED

#### **Confirmation Number**

• Enter the USPTO assigned four digit confirmation number of the patent application associated with this biosequence listing. REQUIRED

### Filing Date

• Enter the filing date of the patent application associated with this biosequence listing. REQUIRED

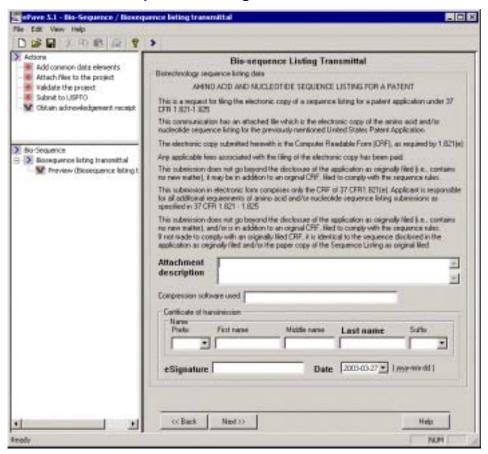
### **Attorney Docket Number**

• Enter a reference number of up to 25 characters that is used to identify the patent application. This number is not assigned by the USPTO and can be any combination of numbers and letters. OPTIONAL.

Select the *Next* button to proceed to the *Bio-sequence Listing Transmittal* screen. Select the *Help* button for information about this screen.



## **Bio-sequence Listing Transmittal Screen**



Biosequence listing transmittal screen

The Bio-sequence listing transmittal screen displays information about the rules and procedures for filing a biosequence listing in Computer Readable Form (CRF). The filer must carefully read the text provided to ensure that the submission is in compliance with 37 CFR 1.821 to 1.825.

### Biotechnology sequence listing data

Use the following procedure to complete the Bio-sequence Listing Transmittal screen:

- Enter a brief description of the Biosequence CRF file that you are filing electronically in the *Attachment description* data field. For a subsequent submission include a description of the Notice to File Missing Parts, including the mail date, and whatever information was required on the Notice.
- Enter the name and version number of any compression software that was used to compress the sequence listing file in the *Compression software used* data entry box. This is necessary so the USPTO can decompress the file at a later time. If no compression method was used, leave this field blank.



NOTE: According to 37 CFR 1.824(a)(4) and (b), the compressed file should be self extracting; however, ePAVE will not allow executable files (.exe) to be submitted to mitigate the possibility of virus infection of USPTO systems.

#### **Certificate of Transmission**

• Enter the name and electronic signature of the individual sending the biosequence listing in the *Certificate of transmission* fields.

*Prefix* – Enter any name prefix of the individual making the submission. OPTIONAL

*First Name* - Enter the first or given name of the individual making the submission.. REQUIRED

*Middle Name* – Enter any middle name of the individual making the submission. OPTIONAL

*Last Name* - Enter the last or family name of the individual making the submission. REQUIRED

Suffix – Enter any name suffix of the individual making the submission. OPTIONAL

eSignature – Enter the electronic mark that is intended as an electronic signature under 37 CFR 1.33(b) of the individual making the transmission. REQUIRED

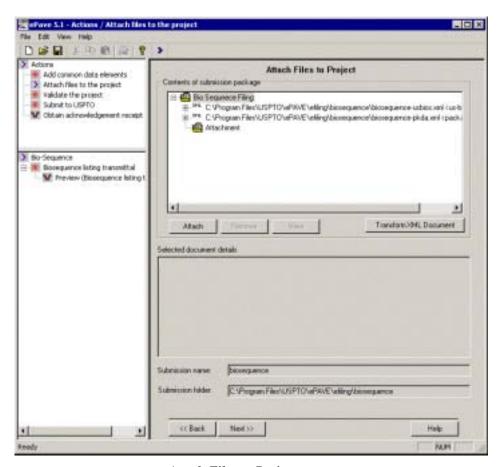
Note: This signature is an electronic legal signature. The individual named MUST add the signature if a signature is provided.

**Date** – Enter the date on which the signature was provided. REQUIRED

• Select the *Back* button to return to the *Add Common Data Elements* screen. Select the *Next* button to proceed to the *Attach Files to Project* screen. Select the *Cancel* button to exit ePAVE. Select the *Help* button for information about the screen.



## **Attach Files to Project Screen**



Attach Files to Project screen

#### **General Information**

Data entered in previous screens is captured in forms in XML format. These forms are automatically attached to the submission and appear in the attachments screen. Each XML document will refer to a document type definition file and a stylesheet.

After entering data on the previous screens, the Biosequence listing file or files are attached using this screen.

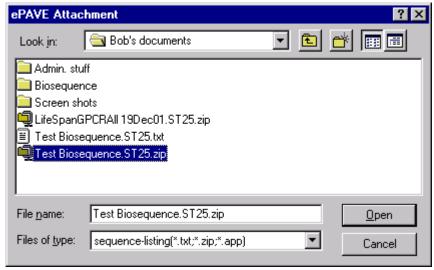
### **Attaching files**

Attach files by completing the following steps:

• Select the *Attach* button to attach files.



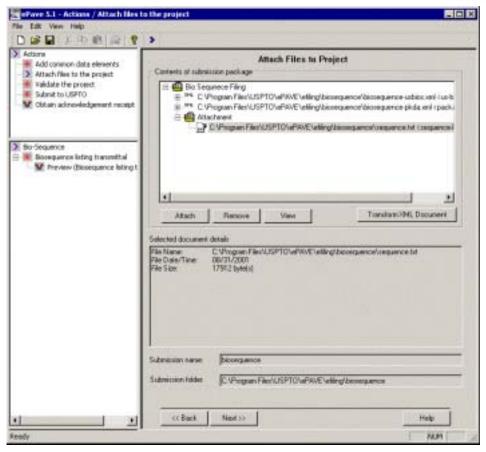
• After the *Attach* button is selected, a dialogue box will be displayed allowing the desired files to be attached.



EPAVE Attachment window

- Attach the Biosequence listing file by double-clicking the file name or by selecting the file and selecting the *Open* button.
- To include additional Biosequence listings with this submission, repeat these steps. Indicate the type of file to be attached from the *Files of type* drop-down list.





Attach Files to Project: Display file information

- After files are attached, select and highlight any filename in the *Contents of submission package* listing to view the details of that file, as shown in the *Selected document details* field. The *Selected document details* field shows the file name including the path, file date, file size, and file details for some file types.
- To remove a file, highlight the file in the *Contents of submission package* listing and select the *Remove* button.
- To view a file, highlight the file in the *Contents of submission package* listing and select the *View* button.

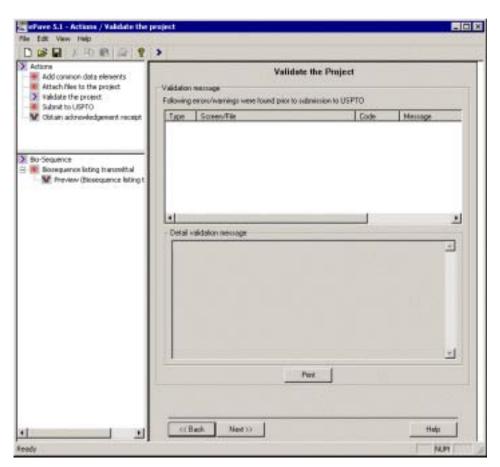
## Viewing and printing files

- Highlight a file from the *Contents of submission package* listing and select the *View* button. This will launch a browser where the file is displayed using the USPTO stylesheet.
- Print the file by right clicking in the browser and selecting *Print* or by using the keyboard shortcut Ctrl + P.



- Files may also be viewed and printed by selecting the *Preview* option from the Forms tree and selecting the *Print* icon, by selecting the *Print* option from the *File* menu, or by using the keyboard shortcut Ctrl + P.
- Preview the transmittal by selecting *Print Preview* from the *File* menu.
- Select the *Back* button to return to the *Bio-sequence Listing Transmittal* screen.
   Select the *Next* button to proceed to the *Validate the Project* screen.
   Select the *Help* button for information about the screen.

## Validate the Project screen



Validate the Project screen

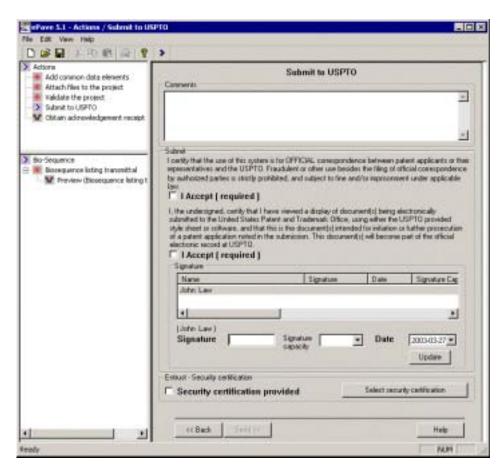
The *Validate the Project* screen validates the submission to identify any errors before the submission to the USPTO.

- Verify that an Internet connection is in place. An Internet connection must be in place for validation to occur.
- Validate the submission at any time by selecting the *Validate the Project* from the *Actions tree*.



- View details of any validation errors or warnings by highlighting the error or warning in the *Validation message* listing. The Details will appear in the *Detail validation message* box.
- Select the *Print* button to print a list of current. This will launch a dialogue box requesting permission to print the errors. Select *Yes* to print a listing of all errors and warnings and details of the errors. Select *Cancel* to return to the *Validate the Project* screen.
- Correct the error by following the suggestion listed in the *Detail validation message* field.
- Repeat these steps to correct all errors
- Select the *Back* button to return to the *Attach Files to Project* screen. Select the *Next* button to proceed to the *Submit to USPTO* screen. Select the *Help* button for information about the screen.

### Submit to USPTO Screen



Submit to USPTO screen

Proceed to the Submit to USPTO screen only after fully entering required and
optional data in the previous screens, validating the submission, and correcting
any errors.



### Comments

• Enter any comments to be included with the submission in the *Comments* data entry box.

## **Signature**

- Select the two *I accept (required)* check boxes to indicate that the filers who have signed this submission have reviewed it and can attest to its completeness.
- Select a particular filer from the *Signature* list. The filer must enter a mark that the filer intends to be an electronic signature in the *Signature* field. REQUIRED.

Note: This signature is an electronic legal signature. The individual named MUST add a signature.

- **Signature capacity** Enter the signature capacity of the filer. Or, select the signature capacity from the drop-down menu. OPTIONAL.
- **Date** Enter the date that the submission is being signed. Or, select the date from the drop-down menu, which converts into a calendar. REQUIRED.
- Select the *Update* button to update the information.
- Repeat for each filer.
- **Select security certification** Select this button to indicate which certificate will be used to make this submission. The PKI certificate will establish a secure, encrypted session with the USPTO server for making the submission.

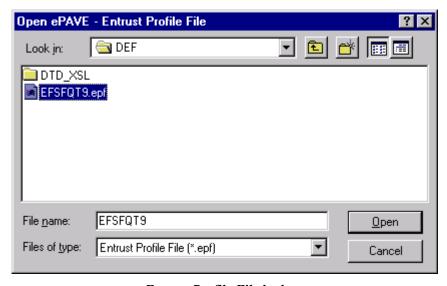


## **Security Certification Screen**



Security Certification screen

- Use the USPTO issued high level PKI certificate by entering the path and name of the Entrust profile in the Entrust profile file data box.
- Browse to the file location using the button labeled ....



Entrust Profile File look-up



• Select the Entrust profile file and select the *Open* button or double-click on the profile file.

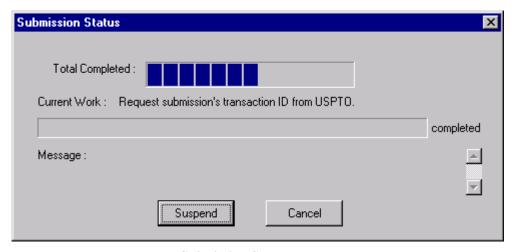
**Password** - Enter the user created Entrust password.

- Select the *Close* button to return to the Submit to USPTO screen after selecting the desired certificate.
- Upon returning to the Submit to USPTO screen, the **Send** button will be available.
- Select the **Send** button to file the submission to the USPTO server.
- Select the *Back* button to return to the *Validate the Project* screen. Select the *Help* button for information about the screen.

## Sending a package to the USPTO

During the submission process, submission status windows are displayed. (Examples appear below.)

The first status window indicates the progress of the submission, the stage the submission has reached, and any messages from the USPTO server.



Submission Status message

When submission is complete, another status window indicates that the submission was successfully uploaded to the USPTO.





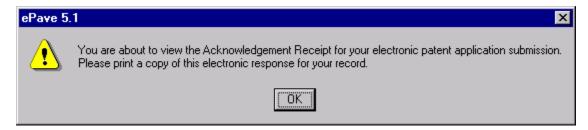
Submission Status message

- Select the *Suspend* button on the status window to pause the submission process.
- Select the *Cancel* button to end the submission process.

## **Obtain Acknowledgment Receipt Screen**

When the submission is complete, the USPTO server will return an acknowledgement receipt.

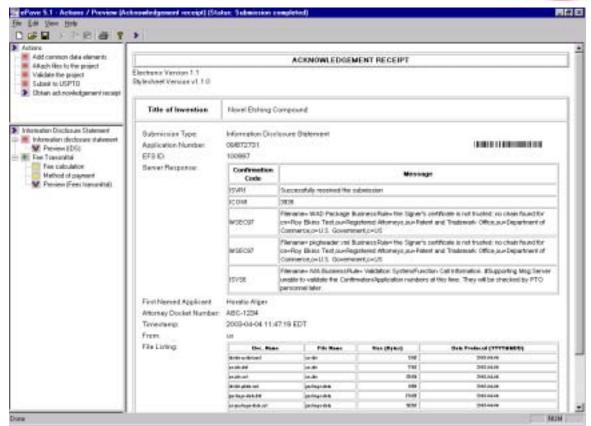
A dialogue box will be displayed indicating that the Acknowledgement Receipt is ready to be viewed.



Acknowledgement Receipt notification

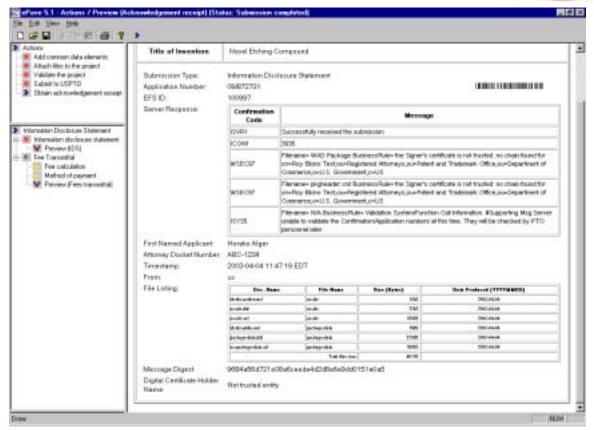
• Select the **OK** button to view the acknowledgement receipt.





Acknowledgment receipt: top half





Acknowledgment receipt: bottom half

• Print the acknowledgement receipt by selecting *Print* from the *File* menu, by selecting the *Print* icon on the toolbar, or by using the keyboard shortcut Ctrl + P.

After the package has been transmitted successfully, the USPTO server dates and timestamps the package and uses digital signature technology to verify that the contents of the package have not been altered during transit.

The USPTO server also returns certain information to ePAVE that ePAVE then uses to create the acknowledgement receipt. The acknowledgement receipt will include the application number, confirmation number, a unique EFS transaction ID and the date and time when the USPTO received the submission.

The acknowledgment receipt is returned in real time. It is automatically saved in the same folder as the rest of the submission. The acknowledgment receipt should be printed.

More information about the acknowledgment receipt is available at the EFS Legal Framework, located at the patent Electronic Business Center web site, USPTO.gov/ebc.



## **Acknowledgement Receipt**

The *Acknowledgement Receipt* contains the following information.

*Title of Invention* – This field displays the title of the invention contained in this submission.

**Submission type** - This field shows the type of submission that was received by the USPTO.

*Application Number* - This field shows the application number of the patent application associated with this biosequence submission.

**EFS ID** – This field shows the ID of the EFS server for this submission.

**Server Response** – These fields display messages being sent from the USPTO EFS server. These messages indicate whether the submission was successful and provide warnings or errors detected by the EFS server.

*ICON1* – This is the USPTO assigned confirmation number.

*First Named Applicant* - This field shows the name of the first named inventor entered in the *Add Common Data Elements* screen.

*Attorney Docket Number* – This field shows the attorney docket number entered on the *Add Common Data Elements* screen.

**Timestamp** – This field shows the date and time that the submission was received at the USPTO.

*From* – This field shows that this submission was for U.S. practice.

*File Listing* - This field shows an itemized listing of all files that were included in the submission package that was sent to the USPTO. It includes the file size, date produced, and the total submission size.

*Message Digest* – This field shows a message that is unique to this submission. This digest serves as proof of what was submitted should any question arise in the future.

*Digital Certificate Holder Name* – This field shows the name of the digital certificate that was used to establish the secure connection with the USPTO server.



# **Exiting ePAVE or Making Another Submission**

- Exit ePAVE by selecting *Exit* from the *File* menu or by selecting the X icon in the upper right-hand corner of the screen.
- Begin a new submission by selecting *New* from the *File* menu, by selecting the *New* icon from the toolbar, or by using the keyboard shortcut Ctrl+N.

Open another submission under construction by selecting *Open* from the *File* menu, by selecting the *Open* icon from the toolbar, or by using the keyboard shortcut Ctrl+O.